

5. Very small opaque gray species with shining front; the hind crossvein rectangular to the costa *gracilis* Packard.
The hind crossvein oblique to the costa 6
6. Femora yellow (in western specimens almost always); inland species.
subopaca Loew.
Femora blackish; occurs only adjacent to tide-water of the Pacific.
millbrae Jones.

NEW ITONIDIDÆ (DIPT.).

BY E. P. FELT,

ALBANY, N. Y.

The species described below comprise some of the more interesting forms recently submitted for study. This is especially true of the remarkable *Johnsonomyia* and the *Camptomysia*, the latter being the only female representative of this genus we have seen.

Campylomyza truncata Felt.

Male.—Length 1 mm. Antennæ a little longer than the body, thickly haired, reddish brown; 14 segments, the fifth with a stem as long as the pyriform basal enlargement, which latter has a length twice its diameter, obtusely rounded. Palpi; first segment broadly oval, second quadrate, with a length twice the diameter, third roundly quadrate, shorter than the second, the fourth $\frac{1}{2}$ longer than the third, more slender. Mesonotum and scutellum dark reddish brown, postscutellum and abdomen a little darker. Halteres yellowish basally, fuscous apically. Legs mostly fuscous yellowish, the distal tarsal segments darker; claws stout, strongly curved, denticulate, the pulvilli as long as the claws. Genitalia; basal clasp segment very short, broad; terminal clasp segment stout and quadrately rounded apically; dorsal plate short, broad, the very short lobes obliquely truncate. Harpes stout, truncate, the distal margin and latero-distal spines heavily chitinized. Type Cecid 1404.

This species, near to *C. flavoscutata* Felt and *C. modesta* Felt, was collected April 17, 1910, by Dr. W. G. Dietz, Hazelton, Pa.

Corinthomyia gracilis, new species.

Male.—Length 1.5 mm. Antennæ extending to the 4th abdominal segment, sparsely haired, dark brown; 14 subsessile segments, the fifth with a stem $\frac{1}{2}$ the length of the cylindrical basal enlargement, which latter has a length nearly twice its diameter and 4 or 5 short, stout whorls; terminal segment reduced, tapering, with a conical appendage apically. Palpi; first segment broadly oval, the second rectangular, with a length over twice its diameter, the third $\frac{1}{2}$

longer than the second, the fourth $\frac{1}{2}$ longer than the third, slender. Body a nearly uniform dark reddish brown. Halteres and legs mostly yellowish transparent; claws stout, strongly curved, the pulvilli longer than the claws. Genitalia; basal clasp segment stout, truncate; terminal clasp segment narrowly oval, somewhat swollen distally; dorsal plate short, the lobes broadly rounded. Harpes heavily chitinized, broadly and roundly emarginate, the broad lobes roundly truncate. Type Cecid 1405.

This species was taken May 18, 1910, at Hazelton, Pa., by Dr. W. G. Dietz. It is most easily recognized by the more slender antennæ and the smaller number of whorls on the fifth antennal segment.

Johnsonomyia cincta, new species.

Female.—Length 5 mm. Antennæ with at least 12, and probably 16 segments, presumably nearly as long as the body, thickly haired, yellowish orange, the fifth with a stem $\frac{3}{4}$ the length of the cylindric basal enlargement, which latter has a length nearly $2\frac{1}{2}$ times its diameter, is distinctly constricted near the middle and has broad, scattering subbasal and subapical bands of moderately coarse setæ. Palpi yellowish, the first segment slender, with a length $2\frac{1}{2}$ times its diameter, the second narrowly oval, a little longer than the first, the third narrowly oval, a little shorter than the second, the fourth slender, somewhat irregular and with a length fully twice that of the third. Eyes large, black, fused. Mesonotum yellowish white, with indistinct magenta reflections. Scutellum yellowish transparent, postscutellum yellowish white. Abdomen reddish yellow, the basal segments somewhat darker dorsally and sparsely clothed with white hairs. Wings subhyaline, with a broad, indistinct, fuscous band across the middle of the wing, particularly marked on the veins; subcosta from its union with the third to its apex, the crossvein, the third vein to a point opposite the tip of subcosta and a corresponding area on the simple fifth vein being more or less fuscous. Venation nearly as in *J. rubra* Felt. Halteres yellowish basally, slightly fuscous apically. Coxæ pale yellowish; femora light straw; tibiæ white basally, the distal fourth pale straw; tarsi, first segment whitish basally, the distal third pale straw, the second tarsal segment mostly whitish, the distal third pale straw, the third and fourth segments whitish, the fifth variably tinged with yellowish or yellowish brown, especially apically. Claws stout, slightly curved, simple, the pulvilli rudimentary. Ovipositor short, the lobes indistinctly triarticulate, the first and second subquadrate, slightly fused, the third roundly triangular and thickly setose. Type Cecid a2260.

This large and strikingly colored midge was taken on the Polochic River, Guatemala, February 22, 1912, by Messrs. Barber and Schwarz.

Asynapta americana, new species.

Male.—Length 1.5 mm. Antennæ as long as the body, thickly haired, dark brown; 21 segments, the fifth with a stem $\frac{3}{4}$ the length of the basal enlargement, which latter has a length $\frac{3}{4}$ greater than its diameter; the subapical

whorl of setæ long, extending to the apex of the following segment; distal segment reduced, irregularly conic, sometimes narrowly fused with the preceding. Palpi; first segment subquadrate, the second irregular, with a length over twice its diameter, the third $\frac{1}{2}$ longer than the second, stout, the fourth $\frac{1}{2}$ longer than the third, slender. Mesonotum dark brown, the submedian lines sparsely haired. Scutellum and postscutellum yellowish. Abdomen sparsely haired, fuscous yellowish. Halteres yellowish. Coxæ and femora basally yellowish, the remainder of the legs fuscous straw. Genitalia; basal clasp segment stout; terminal clasp segment narrowly oval; dorsal plate long, broadly emarginate, the lobes broadly rounded; ventral plate short, deeply and roundly emarginate, the lobes rather long, narrowly rounded. Harpes chitinous, complex, style slender. Type Cecid 1399.

This male was taken by Dr. W. G. Dietz, April 13, 1910, at Hazelton, Pa. It is easily separated from allied forms by the shorter stems of the antennal segments

Camptomyia æstiva, new species.

Female.—Length 1.5 mm. Antennæ nearly as long as the body, sparsely haired, light brown; 21 segments, the fifth with a stem $\frac{1}{4}$ the length of the cylindric basal enlargement, which latter has a length $2\frac{1}{2}$ times its diameter and a sparse whorl of long setæ; terminal segment produced, with a length over twice its diameter and tapering to a narrowly rounded apex. Palpi; first segment with a length $2\frac{1}{2}$ times its diameter, the second $\frac{1}{2}$ longer, stout, the third with a length twice that of the second, slender, the fourth about as long as the third, more slender. Mesonotum reddish brown. Scutellum yellowish, postscutellum dark brown. Abdomen sparsely haired, yellowish orange, the rather stout ovipositor with the distal five segments recurved over the back. Halteres pale yellowish. Legs pale straw; claws stout, strongly curved, unidentate, the pulvilli as long as the claws; terminal lobes long, triarticulate, the apical segments with a length nearly thrice the diameter. Type Cecid 1400.

This female was taken by Dr. W. G. Dietz, at Hazelton, Pa., June 21, 1909.

Porricondyla vernalis, new species.

Female.—Length 1.75 mm. Antennæ as long as the body, thickly haired, dark brown; 13 segments, the fifth with a stem $\frac{1}{4}$ the length of the cylindric basal enlargement, which latter has a length thrice its diameter and a rather sparse subapical whorl of long setæ; terminal segment somewhat reduced. Palpi; first segment subquadrate, the second with a length $\frac{1}{2}$ greater than the first, the third $\frac{1}{3}$ longer than the second, more slender, the fourth $\frac{1}{2}$ longer than the third. Mesonotum reddish brown. Scutellum yellowish, postscutellum reddish yellow. Abdomen sparsely haired, fuscous yellowish. Halteres yellowish transparent. Coxæ reddish yellow; femora, tibiæ and tarsi fuscous straw, except for the whitish distal three segments, especially marked on the posterior legs; claws stout, strongly curved, unidentate, the pulvilli shorter

that the claws. Ovipositor short, the lobes biarticulate, the terminal segment broadly oval, with a length about twice its width. Type Cecid 1401.

This species was taken May 16, 1910, by Dr. W. G. Dietz, at Hazelton, Pa. It is allied to *P. tuckeri* Felt, from which it is easily separated by the stouter antennal segments and the broader lobes of the ovipositor.

***Porricondyla dietzii*, new species.**

Female.—Length 1.5 mm. Antennæ $\frac{1}{4}$ longer than the body, sparsely haired, dark brown; 12 segments, the fifth with a stem $\frac{1}{3}$ the length of the cylindric basal enlargement, which latter has a length about four times its diameter; terminal segment with a length not over five times its diameter. Palpi; first segment slender, with a length five times its diameter, the second a little shorter, stouter, the third a little longer than the second and the fourth $\frac{1}{3}$ longer than the third. Mesonotum shining black. Scutellum and postscutellum fuscous yellowish. Abdomen sparsely haired, a variable yellowish and brown. Wings long, narrow. Halteres yellowish. Coxæ and femora mostly pale yellowish, the remainder of the legs fuscous straw. Ovipositor short, the terminal lobe narrowly oval, with a length over twice its diameter, thickly setose. Type Cecid 1398.

This species was taken June 4, 1910, at Hazelton, Pa., by Dr. W. G. Dietz. It is closely allied to *P. porrecta* from which it is easily separated by the black mesonotum and the perceptibly shorter terminal segments of the antennæ and palpi.

***Porricondyla porrecta*, new species.**

Female.—Length 1.3 mm. Antennæ a little shorter than the body, sparsely haired, fuscous yellowish; 12 segments, the fifth with a stem about $\frac{1}{3}$ the length of the cylindric basal enlargement, which latter has a length about four times its diameter; terminal segment greatly produced, with a length fully six times its diameter. Palpi; first segment slender, with a length five times its diameter, the second segment as long as the first, stouter, the third as long as the second, more slender, the fourth $\frac{1}{2}$ longer than the third, very slender. Face fuscous yellowish, mouth reddish. Mesonotum dark brown, the submedian lines narrow, yellowish. Scutellum pale red, postscutellum fuscous yellowish. Abdomen yellowish brown, the dorsal sclerites fuscous brown; ovipositor pale yellow. Wings hyaline, costa dark brown. Halteres yellowish basally, fuscous subapically. Legs fuscous yellowish with the distal segment of the posterior tarsi lighter; claws stout, strongly curved, unidentate, the pulvilli as long as the claws. Ovipositor short, terminal lobe narrowly oval and sparsely clothed with long setae. Type Cecid 1628.

This female was taken on the window of a forest hut at Davidson's River, N. C., September 26, 1906. It is closely allied to *P.*

quercina Felt and may be distinguished by the yellowish brown abdomen, the longer, more slender palpi and the form of the terminal lobe of the ovipositor.

***Dasyneura eugeniæ*, new species.**

Gall.—Light green, irregularly subglobular and with a diameter ranging from 5 to 7 mm. Each gall contains a number of oval cells approximately 1.5 mm. in diameter. One examined March 22 contained a living pupa.

Male.—Length 1.5 mm. Antennæ longer than the body, sparsely haired, brownish black; 20 segments, the fifth with a stem as long as the cylindrical basal enlargement, which latter has a length $\frac{1}{4}$ greater than its diameter and a thick whorl of very long, slender setæ; terminal segment reduced, narrowly oval, and sometimes fused with the preceding. Palpi; first segment subquadrate, the second with a length four times its diameter, the third a little shorter, more slender, the fourth $\frac{1}{2}$ longer than the third. Mesonotum reddish brown. Scutellum yellowish, postscutellum yellowish brown. Abdomen yellowish. Genitalia fuscous. Wings hyaline, the third vein curving anteriorly. Halteres yellowish. Coxæ, femora and tibiæ mostly pale straw, the tarsi dark straw or brownish; claws rather heavy, unidentate, the pulvilli as long as the claws. Genitalia, dorsal plate deeply and triangularly emarginate; ventral plate deeply and roundly emarginate, the lobes slender. Harpes stout, with a quadrate process near the internal distal angle; style short.

Female.—Length 1.75 mm. Antennæ nearly as long as the body, sparsely haired, dark brown; probably 20 segments, the fifth subsessile, with a length about twice its diameter and rather thick subbasal and subapical whorls of long, stout setæ. Ovipositor about $\frac{2}{3}$ the length of the abdomen, moderately stout, the terminal lobes narrowly lanceolate, with a length thrice the width. Other characters practically as in the male. Type Cecid a2258.

This midge was reared from the deformed fruit of *Eugenia buxifolia* collected at Key West, Fla., March 15, 1912, by E. A. Schwarz. The adults are easily separated from their allies by the numerous antennal segments.

***Youngomyia pennsylvanica*, new species.**

Male.—Length 2.25 mm. Antennæ $\frac{1}{4}$ longer than the body, thickly haired, dark brown; 14 segments, the fifth trinodose, the basal and distal stems with a length $\frac{1}{2}$ and twice their diameters, respectively; the middle constriction deep; circumfili stout, the loops short, not extending to the tip of the segment; terminal segment, basal portion of the stem with a length $2\frac{1}{2}$ times its diameter, the middle and distal enlargements narrowly united, the latter subcylindric, with a length nearly twice its diameter and apically a long, somewhat fusiform appendage. Palpi; first segment short, irregularly subquadrate, the second and fourth equal, the third a little shorter. Mesonotum dark brown, the submedian lines, scutellum and postscutellum fuscous yellowish. Abdomen sparsely haired, darker. Costa dark brown. Halteres yel-

lowish. Coxæ and femora yellowish, the remainder of the legs fuscous yellowish. Genitalia: basal clasp segment with a long, thickly setose, narrowly triangular lobe at the internal basal angle; dorsal plate short, narrowly and slightly incised, the lobes produced laterally, roundly oblique and thickly setose; ventral plate long, broadly rounded; style long, expanded distally, broadly emarginate. Type Cecid 1395.

This interesting male was taken at Hazelton, Pa., June 12, 1910, by Dr. W. G. Dietz. This species is easily separated from previously characterized males by the extremely short basal portion of the stem of the fifth antennal segment

FOUNDATION OF SOME NEW GENERA AND SPECIES OF MUSCOID FLIES MAINLY ON REPRODUCTIVE AND EARLY-STAGE CHARACTERS.

BY CHARLES H. T. TOWNSEND,

PIURA, PERU.

The adult specimens which serve as partial types of the following forms I have been unable to secure for description of their external characters. They were left by me in 1909 partly in the U. S. N. M. collection, and partly in the collection at the Gypsy Moth Parasite Laboratory, and all were properly labeled with TD numbers. It has been impossible as yet to locate them or have them sent to Peru, and therefore their full description must be deferred until some future time. Meanwhile the names are needed for use in the paper on the reproductive systems, eggs and first-stage maggots, to be published with figures under the title of "Contribution to a Thorough Knowledge of the Muscoid Flies." Therefore I propose here formally to found these several genera and species on descriptions as complete as it is possible for me to make them at this time, necessarily drawn mainly from the reproductive, egg and first-stage maggot structures. I believe that the forms can be unmistakably determined in each case from the characters and data given.

***Plagiops littoralis*, new species.**

Plagiops littoralis gen. et sp. nov., TD738—Ann. E. S. Am., Vol. IV, pp. 131 and 141.